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U.S. Continues to Tread Water in Global R&D Tax Incentives

BY ROBERT D. ATKINSON AND SCOTT M. ANDES | AUGUST 12, 2009

Research and development (R&D) is a foundation of greater innovation, higher productivity and more high-value added jobs. And a host of academic studies have found that the R&D tax credit is an effective tool for spurring more private sector R&D.

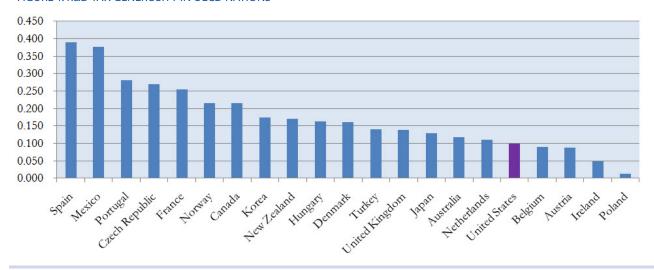
The United States was one of the first countries to realize the importance of spurring R&D through the tax code, putting in place the R&D credit in 1981. As a result, throughout the 1980s the United States had the most generous R&D tax incentive in the world. However, other nations soon learned from the United States' success with the credit and began to not just copy us, but go beyond us. As a result, by 1996 the United States had fallen to seventh in R&D tax generosity among the 30 OECD nations, behind Spain, Australia, Canada, Denmark, the Netherlands, and France. And the slide has continued. By 2004 we had fallen ten more spots to 17th.¹ Even the recent expansion of the credit by Congress with the creation of the Alternative Simplified Credit merely allowed the United States to hold position, as in 2008 the United States continued to be ranked 17th overall (and 19th for R&D tax generosity towards small businesses) amongst OECD nations.2

But the United States has not just fallen behind the richer OECD nations, a number of developing non-OECD nations, such as China, India, Brazil, and Singapore, now also provide more generous tax treatment for R&D expenditures. China, for example, provides a 150 percent deduction on R&D expenses (provided that R&D spending increased 10 percent over the prior year)—on top of the fact that R&D personnel salaries are nearly 1/6th what they are in the United States.³

In many cases, the tax benefit of performing R&D in nations other than United States is significantly greater than conducting it in the United States. In the latest OECD rankings, the U.S. credit is just over a quarter as generous as that of Spain and Mexico. And Canada's and Norway's tax incentive for small businesses are, respectively, nearly four and three times higher than the United States'. Indeed, the U.S. credit is less competitive than all 21 OECD countries offering an R&D tax credit in 2008, short of Belgium, Austria, Ireland and Poland (see Figure 1).4 However it's worth noting that all four countries have effective corporate tax rates below the U.S. rate with Ireland's and Poland's effective corporate tax rates less than one-third and less than 40 percent, respectively, than the U.S. effective corporate tax.

The U.S. R&D tax credit is no longer relatively generous because as other nations have begun to realize the growth potential and competitive edge they can achieve through creating globally com-

FIGURE 1: R&D TAX GENEROSITY IN OECD NATIONS



petitive R&D tax policies, they have expanded their incentives, in some cases quite dramatically. Japan for example, had a significantly lower R&D tax incentive than the United States' in the early 1990s, but now has a credit roughly one-third more generous than the United States.⁵ And there is no sign that this global effort to provide greater competitive incentives for R&D is slowing. In 2009, for example, Australia increased its credit to provide a 45 percent refundable credit on all R&D expenditures, not just on additional expenditures. According to a press released by several Australian MPs the new credit "is the biggest reform to business innovation support in more than a decade."6 Similarly, in 2008 France instituted a 50 percent credit for companies applying for the credit for the first time and a 60 percent flat credit on all R&D expenditures made in partnership with a federal laboratory. Indeed, in the last decade every country that has an R&D tax incentive has increased the generosity of those incentives.

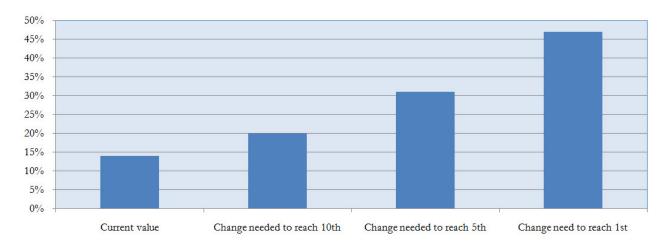
The principal reason for this expansion is that policymakers in these nations are acutely aware that their nations are in competition for globally-mobile R&D. For example, one of the motivations for France was the desire to make their overall tax code more competitive internationally. These policymakers intuitively know what academic research has shown: that R&D performed in one country is responsive to the change in costs of performing R&D in a "competitor" coun-

try.⁸ This partly explains not only why U.S. corporate R&D has expanded twice as fast overseas than in the United States, but also why U.S. companies expand their foreign R&D faster in countries with R&D tax incentives than those without.⁹

If the United States wanted to be more globally competitive for R&D activities it needs to significantly expand the R&D credit, not just make it permanent. Using the Alternative Simplified Credit (ASC) as the base (the ASC provides a 14 percent credit on R&D expenditures in excess of 50 percent of base period expenditures), the United States would have to increase the ASC to 20 percent to move to 10th place, 31 percent to move to 5th place, and 47 percent to be the most generous of the OECD nations (see Figure 2).

In the face of this new competition for R&D and the economic activity and jobs that result from it, it is time for the United States to take steps to remain internationally competitive. Expanding the R&D tax credit not only makes the United States a more competitive location for internationally-mobile R&D, it is also a cost-effective tool to spur more investments in R&D at home. Indeed, a wide range of academic studies show that every one tax dollar forgone stimulates between one and three dollars in private sector R&D investment. Moreover, R&D expenditures create jobs, many of them paying above the minimum wage. 11

FIGURE 2: VALUE OF THE U.S. ALTERNATIVE SIMPLIFIED CREDIT AND CHANGE NEEDED TO INCREASE OECD RANK



As such, in order to increase global competitiveness and innovation, Congress should take steps to significantly expand the R&D credit. In particular, they should increase the rate of the Alternative Simplified Credit, and broaden the current credit for collaborative energy-related research to any area of research.

In addition, the definition of qualifying R&D expenditures should be broadened to include not just product R&D, but also process R&D.¹² If the United States is serious about regaining its competitive edge, expanding the R&D tax credit is an important step in that direction.

Endnotes

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- 9. Ibid.
- 10. Bronwyn Hall, "The Effectiveness of Research and Experimental Tax Credits: Critical Literature Review and Research Design," (Washington, D.C.: U.S. Congress, Office of Technology Assessment, 1995).
- 11. Daniel Castro and Robert D. Atkinson, ""Stim-Novation": Investing in Research to Spur Innovation and Boost Jobs," Information Technology and Innovation Foundation, Washington, D.C., January 27, 2009 www.itif.org/files/2009-stim-novation.pdf.
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